What Is Claimed Is:

1. A method of producing an agarose coated, agarose-collagen secretory cell macrobead comprising;

(a) suspending secretory cells in a solution containing collagen,

(b) adding agarose to said suspended secretory cells of step (a) to form secretory cells suspended in a mixture of agarose and collagen,

(c) forming a collagen-agarose semisolid macrobead from said suspended secretory cells of step (b),

(d) treating said collagen-agarose semisolid macrobead of step (c) to polymerize collagen contained in said semisolid macrobead, whereby a solid collagen-agarose macrobead is formed,

(e) coating said solid macrobead of step (d) with agarose to obtain an agarose coated, agarose-collagen secretory cell macrobead.

2. The method of claim 1, wherein step (e) comprises rolling said solid macrobead of step (d) in 5% agarose, contacting said rolled solid macrobead to mineral oil, and washing said rolled macrobead to obtain said agarose coated, agarose-collagen secretory cell macrobead.

3. The method of claim 1, wherein said secretory cells are pancreatic islets.

4. The method of claim 3, wherein said pancreatic islets are human pancreatic islets.

5. The method of claim 3, wherein said pancreatic islets are bovine pancreatic islets.

6. The method of claim 3, wherein said pancreatic islets are porcine pancreatic islets.

7. The method of claim 3, wherein said macrobead contains from about 50,000 to about 700,000 pancreatic islets.

8. A method of producing an agarose coated, gelfoam secretory cell macrobead comprising;

(a) suspending secretory cells on gelfoam,

(b) rolling said gelfoam containing said suspended secretory cells into a sphere,

(c) coating said sphere with agarose to obtain an agarose coated, gelfoam secretory cell macrobead.

9. The method of claim 8, wherein step (c) comprises:

(1) pouring agarose on the surface of said sphere to form a macrobead,
(2) rolling said macrobead in 5% agarose,
(3) contacting said rolled macrobead produced in step (2) to mineral oil,
(4) and washing the macrobead of step (3) to form said agarose coated, gelfoam secretory cell macrobead.

10. The method of claim 8 wherein said secretory cells are pancreatic islets.

11. The method of claim 10, wherein said pancreatic islets are human pancreatic islets.

12. The method of claim 10, wherein said pancreatic islets are bovine pancreatic islets.

13. The method of claim 10, wherein said pancreatic islets are porcine pancreatic islets.

14. The method of claim 10, wherein said macrobead contains from about 50,000 to about 700,000 pancreatic islets.

15. A method of producing an agarose coated, agarose secretory cell macrobead comprising;

(a) suspending secretory cells in agarose,

(b) forming a macrobead from said suspended secretory cells of step (a),

(c) incubating said macrobead of step (b) in humidified air,

(d) coating said macrobead of step (c) with agarose to form an agarose coated, agarose secretory cell macrobead.

16. The method of claim 13, wherein step (e) comprises rolling said solid macrobead of step (c) in 5% agarose, contacting said rolled solid macrobead to mineral oil, and washing said rolled macrobead to form said agarose coated, agarose secretory cell macrobead.

17. The method of claim 15 wherein said secretory cells are pancreatic islets.

18. The method of claim 17, wherein said pancreatic islets are human pancreatic islets.

19. The method of claim 17, wherein said pancreatic islets are bovine pancreatic islets.

20. The method of claim 17, wherein said pancreatic islets are porcine pancreatic islets.

21. The method of claim 17, wherein said macrobead contains from about 50,000 to about 700,000 pancreatic islets.

22. An agarose coated, agarose-collagen secretory cell macrobead.

23. The agarose coated, agarose-collagen secretory cell macrobead of claim 22, wherein said secretory cell is a pancreatic islet.

24. The agarose coated, agarose-collagen secretory cell macrobead of claim 23, wherein said pancreatic islet is a human pancreatic islet.

25. The agarose coated, agarose-collagen secretory cell macrobead of claim 23, wherein said pancreatic islet is a bovine pancreatic islet.

26. The agarose coated, agarose-collagen secretory cell macrobead of claim 23, wherein said pancreatic islet is a porcine pancreatic islet.

27. An agarose coated, gelfoam secretory cell macrobead.

28. The agarose coated, gelfoam secretory cell macrobead according to claim 27, wherein said secretory cell is a pancreatic islet.

29. The agarose coated, agarose-collagen secretory cell macrobead of claim 28, wherein said pancreatic islet is a human pancreatic islet.

30. The agarose coated, agarose-collagen secretory cell macrobead of claim 28, wherein said pancreatic islet is a bovine pancreatic islet.

31. The agarose coated, agarose-collagen secretory cell macrobead of claim 28, wherein said pancreatic islet is a porcine pancreatic islet.

32. An agarose coated, agarose secretory cell macrobead.

33. An agarose coated, agarose secretory cell macrobead according to claim 32, wherein said secretory cell is a pancreatic islet.

34. The agarose coated, agarose-collagen secretory cell macrobead of claim 33, wherein said pancreatic islet is a human pancreatic islet.

35. The agarose coated, agarose-collagen secretory cell macrobead of claim 33, wherein said pancreatic islet is a bovine pancreatic islet.

36. The agarose coated, agarose-collagen secretory cell macrobead of claim 33, wherein said pancreatic islet is a porcine pancreatic islet.

37. A method of treating a patient having a condition caused by an impaired functioning of secretory cells:

transplanting into said patient a therapeutically affective amount of secretory cell macrobeads selected from the group consisting of agarose coated, agarose-collagen secretory cell macrobeads; agarose coated, gelfoam secretory cell macrobeads; and agarose coated, agarose secretory cell macrobeads.

38. The method of claim 37, wherein said condition is insulin dependent diabetes.

39. The method of claim 38, wherein said secretory cell is a pancreatic islet.

40. The method of claim 39, wherein said pancreatic islet is a human pancreatic islet.

41. The method of claim 39, wherein said pancreatic islet is a porcine pancreatic islet.

42. The method of claim 39, wherein said pancreatic islet is a bovine pancreatic islet.

43. The method of claim 39, wherein said secretory cell macrobeads are placed in the intraperitoneal cavity.

44. The method of claim 39, wherein about 5 to about 10 macrobeads are inserted, each macrobead containing from about 50,000 to about 700,000 pancreatic islets.

45. The method of claim 39, wherein said secretory cell macrobeads are agarose coated, agarose-collagen secretory cell containing macrobeads.

46. The method of claim 39, wherein said secretory cell macrobeads are agarose coated, gelfoam secretory cell macrobeads.

47. The method of claim 39, wherein said secretory cell macrobeads are agarose coated, agarose secretory cell macrobeads.

48. A method for preserving secretory cells, comprising:

(a) forming macrobeads selected from the group consisting of agarose coated, agarose-collagen secretory cell macrobeads; agarose coated, gelfoam secretory cell macrobeads; and agarose coated, agarose secretory cell macrobeads; and

(b) incubating said secretory cell macrobeads.

49. The method according to claim 48, wherein said secretory cell is a pancreatice islet.

50. The method according to claim 49, wherein said pancreatice islet is incubated at 24°C or 37°C.